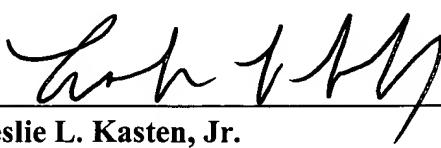above amendments. Entry of this amendment and early examination of this application are respectfully solicited.

Respectfully submitted,

SEUNG-HO OH

_6/21/01_
(Date)

By: _[signature]_

Leslie L. Kasten, Jr.
Registration No. 28,959
AKIN, GUMP, STRAUSS, HAUER & FELD, L.L.P.
One Commerce Square
2005 Market Street - Suite 2200
Philadelphia, PA 19103-7086
Telephone: (215) 965-1200
Direct Dial: (215) 965-1290
Facsimile: (215) 965-1210
E-Mail: lkasten@akingump.com

LLK:jf
Enclosure

calculated by said WMC-unit and the similarities of the matched scanning columns stored in said S-buffer.

3. The apparatus according to Claim 1 ~~or 2,~~ characterized in that said strip-processing unit comprises a plurality of S-units connected in parallel with each other, and brightness data of the matched scanning columns less than the number of said S-units can be inputted to a first S-unit and sequentially shifted to the next S-unit up to the last S-unit, and wherein said S-units calculate the similarity of each matched scanning column with respect to the reference column using differential brightness of pixels.

4. The apparatus according to Claim 3, characterized in that said first S-unit comprises:

a serial/parallel converter for converting serial brightness data of pixels on the matched scanning column into parallel data output to the next S-unit;

a differential-brightness processing unit for obtaining differential brightness of pixels between the matched scanning column and the reference column;

a comparator for comparing the differential brightness of pixels obtained by said differential-brightness processing unit to a threshold value;

an adder for accumulating outputs of pixels from said comparator; and

a D-flip-flop for buffering outputs from said adder into said S-buffer.

5. The apparatus according to Claim 3, characterized in that each of said S-units other than said first S-unit comprises:

a parallel/serial converter for converting parallel brightness data of pixels of the matched scanning column into serial data output to the next S-unit;

a differential-brightness processing unit for obtaining differential brightness of pixels between the matched scanning column and the reference column;

a comparator for comparing the differential brightness of pixels obtained by said differential-brightness processing unit to a threshold value;